

REMARKS

Claims 1, 4, 13, and 18 have been amended. Claims 1 through 24 remain pending in this application. In light of the positions presented herein, all claims are believed to be in condition for allowance.

In the April 12, 2005, office action Claims 1-3, 13, 15 and 17 were rejected under 35 U.S.C. § 102(e) as being anticipated by Coffee (U.S. Patent No. 6,105,877). Claims 4-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coffee in view of Schroeder (U.S. Patent No. 5,591,395). Claims 9-10 and Claims 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coffee in view of Schroeder, Rabe et al. (U.S. Patent No. 6,531,142) and Bloch (U.S. Patent No. 4,071,616). Claims 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coffee in view of Schroeder, Rabe, Bloch and further in view of Peltier (U.S. Patent No. 5,382,410). Claims 14, 16 and 18 through 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coffee in view of Schroeder.

Claims 1-3, 13, 15 and 17

Claims 1-3, 13, 15 and 17 were rejected under 35 U.S.C. § 102(e) as being anticipated by Coffee. Applicant asserts that Coffee clearly does not teach or suggest the invention as presently claimed.

Coffee discloses a dispensing device requiring at least two comminution means arranged to provide an area where charged comminutions of opposite polarity are admixed – in order to control the net charge on the admixed aerosols. The device is specifically directed to partially or totally removing the electric charge from the liquid droplets. Accordingly, because the device must include two comminution means (see col. 2, lines 12-16), the device must include two liquid reservoirs (20), two electrokinetic pumps (22), two voltage generators (23) and two nozzles (24). Applicant notes that the Examiner has defined the unlabeled nozzle of (24) a "dispenser" – of which there are two.

Coffee reference does not disclose, teach or suggest a non-aqueous electrostatically dispensable disinfectant composition comprising an alcohol solvent, a glycol solute and a conductivity control component comprising at least one of a silicon oil, an essential oil and a fatty acid ester. Although Coffee recites using the device for dispensing perfumes or aromas (which can include aqueous compositions) –Applicant notes that "perfumes" and/or "aromas" are neither provided for use as conductivity control component nor described as conductivity control components.

Nonetheless, Claim 1 distinguishes over the Coffee reference by reciting a composition including a conductivity control component comprising at least one of a silicon oil, an essential oil and a fatty acid ester. Only one proposed composition is taught by Coffee which includes 80% ethanol and 20% polyethylene glycol – and inclusion of at least one of a silicon oil, an essential oil and a fatty acid ester is not contemplated, much less enabled by the Coffee reference. Accordingly, Claim 1 and all claims depending therefrom are believed patentably distinct from the Coffee reference and are therefore allowable thereover.

In addition, Claim 13 distinguishes over Coffee by reciting an electrostatic dispensing apparatus including only one dispenser. Because Coffee clearly requires use of two comminution means, including two dispensers, Claim 13 and all claims depending therefrom are patentably distinct thereover.

Claims 4-8

Claims 4-8 depend from Claim 1. The teachings of Schroeder do not suggest modification of Coffee that would anticipate or make obvious Claim 1. In addition, in light of the preceding, as the Coffee reference should be withdrawn, any combination with Schroeder is, likewise, inappropriate. Therefore, Applicant asserts that Claims 4-8 are not obvious in view of Coffee or Schroeder and are thus patentable thereover.

Claims 9, 10 and 22-24

Claims 9, 10 and 22-24 were rejected under 35 U.S.C. § 103 as unpatentable over Coffee, Schroeder, Rabe and Bloch. Applicant respectfully disagrees with the Examiner's assertion because the Examiner has not established a *prima facie* case of obviousness. In particular, there is no teaching or discussion in any of the Coffee, Schroeder, Rabe and/or Bloch references that suggests or motivates one skilled in the art to make the Examiner's proposed combinations.

To establish a *prima facie* case, there must be some suggestion or motivation, either in the references themselves or in knowledge generally available to one of ordinary skill in the art, to modify the reference. Importantly, the teaching or suggestion to make the combination and the reasonable expectation of success must be found in the prior art and not in the Applicant's disclosure.

The genius of invention is often a combination of known elements which in hindsight seems preordained. Thus, rejections based on 35 U.S.C. § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Such reason or basis must stem from some teaching, suggestion, or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. These showings are an essential part of complying with the burden of presenting a *prima facie* case of obviousness.

The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967). The Federal Circuit has repeatedly cautioned against employing hindsight by using the Applicant's invention as a blueprint to reconstruct the claimed invention from isolated teachings of the prior art. See Grain Processing Corp. v. American Maize-Prods. Co., 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

Moreover, where the art in question is less technical, the test of whether to modify/combine references needs to be applied rigorously. See McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351 (Fed. Cir. 2001).

First, Applicant disagrees that there is motivation or teaching to combine the Coffee and Schroeder references, and more particularly, Applicant disagrees that the motivation to combine the teachings of Coffee and Schroeder comes from Schroeder, as recited on page 14 of the Examiner's Response to Arguments.

Schroeder is cited for disclosing a triethylene glycol component (as illustrated in example 2). However, Schroeder only teaches a composition including triethylene glycol in combination with water – the most preferred solvent taught for glycols. Schroeder does not teach or suggest the combination of triethylene glycol with alcohol, as recited in the present invention. In fact, Schroeder teaches away from the combination of glycols with volatile solvents, such as alcohol. Where a volatile component such as a perfume is used, Schroeder states that less than 15% should be used. Thus, after a reading a Schroeder, one skilled in the art would not substitute a triethylene glycol component in the solution disclosed in Coffee – which contains 80% ethanol, a volatile component in an amount that significantly exceeds the amount required or taught by Schroeder.

Importantly, Schroeder does not teach or suggest that a solution containing triethylene glycol in combination with about 15% or more alcohol can readily generate particles which form an aerosol suspension in the air at temperatures that can safely be used in an consumer appliance. Moreover, and contrary to the Examiner's interpretation, Schroeder does not teach that a solution containing triethylene glycol in combination with about 15% or more alcohol can readily generate particles which form an aerosol suspension in the air at temperatures that can safely be used in an electrostatic dispensing consumer appliance.

Schroeder is also cited for disclosing a fragrance component (as illustrated in example 1) present in an amount within the range recited in the present claims (from about 15% to about 50%). Again, Schroeder teaches away from inclusion of perfume or other volatile components, but states that when included, the perfume component should be less than 15% of the total formulation. Thus, Schroeder teaches away from any combination with the Coffee compositions, where addition of about 15% of a perfume component to a solution including a significant amount of ethanol clearly falls outside the amount of volatile component permitted by the Schroeder reference.

Applicant asserts that Coffee does not provide motivation or suggestion to modify the composition of the Coffee reference to include triethylene glycol or a perfume component in the amounts disclosed in Schroeder. The Examiner states on page 14 of the Response to Arguments that the Coffee reference does not exclude any liquid for use in the electrohydrodynamic spray device provided the liquid has a viscosity and conductivity falling within the ranges taught in Col. 4, lines 30-33. However, each constituent of the liquid must be provided in an amount sufficient to render liquid electrostatically dispensable – not every liquid having a viscosity and conductivity falling within the Coffee ranges is capable of realizing an electric potential, as recognized in Col. 8, lines 10-12.

Moreover, aerosol generation of alcohol-based compositions clearly requires different types of formulations and amounts of constituents than aerosol generation of water-based compositions. Large amounts of water create aerosols which are difficult to control in terms of droplet size and spacing when electrostatic means are used. Thus, there is no motivation provided in Coffee to substitute triethylene glycol or a perfume component in the amounts disclosed in Schroeder into the alcohol-based compositions of Coffee – as there is no indication that the Coffee device would work as intended.

Both the Coffee references and the Schroeder references disclose methods for generating airborne particles. However, the devices and methods utilized in each

reference are functionally distinct – it is not intuitive to presume that constituents successfully used in the Schroeder indirect heating device could be successfully used in the Coffee electrostatic dispensing device without undue experimentation i.e., trial and error to determine what percent ranges of constituents yields a liquid having a viscosity and resistivity falling within the ranges recited in Coffee. Combinations of constituents and the required concentrations of each for achieving a desired spray quality, droplet size and charge is subject to significant experimentation. Applicant asserts that this obvious-to-try rationale is an improper standard upon which to base an obviousness rejection.

Next, Applicant further asserts that there is motivation or teaching to combine the Coffee and Schroeder references with Rabe. Rabe teaches an electrostatically-stabilized topical composition including an insulating component, a conductive component, a particulate material and a thickener. The Rabe reference solves the problems of prior art related to electrostatically dispensing topical compositions containing particulate matter by providing compositions of very specific, defined amounts of each individual constituent – as determined through extensive experimentation, see Col. 1, lines 57-67 and Col. 2, lines 1-4. Thus, the compositional make-up, including the weight ranges selected for each of the components recited in Rabe, are selected to achieve stable topical compositions, thereby overcoming the problems associated with the prior art. Rabe does not teach use of any of its individual components apart from each other in the weight ranges recited therein – as the Rabe compositions themselves embody the Rabe invention.

Rabe is cited for teaching a composition with an alcohol component within the ranges of the present claims. However, Rabe does not teach or suggest any compositions including 2 to 90 weight percent of a conductive component (alcohol) that do not additionally include an insulating component, a particulate and a thickener. Particularly, and unlike the Coffee and Schroeder references, Rabe does not teach or suggest any composition including a conductive component (alcohol) without a corresponding

insulating component. Indeed, the Robe reference teaches that both components must be provided to ensure the composition realizes its therapeutic benefit while remaining electrostatically dispensable. Applicant asserts that Rabe teaches only electrostatically deliverable compositions that do not deviate from the compositions described – including the specific constituents present in their defined weight percent ranges.

Further, as stated above, the Coffee reference in combination with Schroeder teaches away from combination with Rabe, as the Schroeder method inherently teaches against use of composition containing a high percentage of a volatile component, such as alcohol. Further, the teachings of Rabe do not suggest modification of Coffee or Schroeder or a combination thereof that would anticipate claims or make obvious Claims 9 and 22.

Bloch is cited for teaching perfume in the amount from 0.5 to 30 weight percent. The Examiner suggests that the motivation to increase the amount of perfume present in the Coffee compositions comes from Bloch, that is, in order to release the perfume with a sufficient level so as to be considered a satisfactory air freshener. However, Applicant respectfully asserts that there is no suggestion or motivation to combine Coffee, Schroeder and/or Rabe with Bloch – and more particularly, that the teachings of the Bloch reference have been misconstrued.

Bloch is directed to water-based, solid gel compositions for use as slowly diffusing air fresheners. To overcome the problems of the prior art, amylose starch is used as a gelling agent in combination with specific, appropriate amounts of perfume in an aqueous system. See Col. 1, lines 33-37. It is this combination of constituents that provides surprising and unexpected results – release of the perfume from the solid gel with a sufficient level so as to be considered satisfactory air freshener gels. See Col. 3, lines 50-52. Bloch is not directed to all air fresheners, but rather only to solid, gel air fresheners and the slow release of perfume therefrom.

Release of perfume from a solid gel involves an entirely different mechanism than the release of constituents by the devices described by Coffee, Schroeder and Rabe. Solid gels release perfume and moisture through contact with air. i.e. evaporation – and thus, release constituents in a slow manner. Gel strength is a significant factor in the rate and level of perfume release from an air freshener gel, as taught by Bloch. However, Bloch does not teach, motivate or suggest that the amounts of perfume determined to be successful in combination with starch for use in a gel air freshener could be satisfactorily used in the compositions described by Coffee, or that such levels of perfumes would be capable of electrostatic dispensation.

Further, there is no motivation provided in Coffee for providing a perfume component in the amounts specified in Bloch to release perfume with a sufficient level so as to be considered a satisfactory air freshener gel – (the teaching of Bloch). Further, as stated previously, the combination of Coffee with Schroeder teaches against inclusion of a perfume component in levels 15% or greater – since Schroeder teaches away from inclusion of a volatile component in amounts that exceed 15%. Accordingly, the teachings of Bloch do not suggest modification of Coffee, Schroeder or Rabe that would anticipate claims or make obvious Claims 9 or 22 or any claim depending therefrom.

Applicant asserts that a reading of Coffee, Schroeder, Rabe, and/or Bloch does not provide on skilled in the art with motivation to achieve the present invention. There is simply no motivation in Coffee to pick and choose specific components from such a diverse range of compositions as presented in Schroeder, Rabe, and Bloch to arrive at the present invention. Clearly, the Examiner has overlooked the specific teachings of each of the cited references, many of which teach against combination of certain compositional elements, or require certain combinations of elements to achieve the desired utility of the reference. Accordingly, Applicant asserts that Claims 9 and 22 and all claims depending therefrom are not obvious in view of Coffee, Schroeder, Tsuchiya, and Bloch and are patentable thereover.

Claims 11 and 12

Claims 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coffee in view of Schroeder, Rabe, Bloch, and Peltier (U.S. Patent No. 5,382,410). Claims 11 and 12 depend from Claim 9. In light of the preceding, as the Coffee, Schroeder, Rabe and Bloch references should be withdrawn, any combination with Peltier is, likewise, inappropriate. Therefore, Applicant asserts that Claims 11 and 12 are not obvious in view of Coffee, Schroeder or Peltier and are thus patentable thereover.

Claims 14, 16 and 18-21

Claims 14, 16 and 18 through 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coffee in view of Schroeder.

As recited above, Applicant asserts that the combination of Coffee and Schroeder is an inappropriate basis on which to base an obviousness rejection. Nonetheless, Claim 18 distinguishes over Coffee by reciting an electrostatic dispensing apparatus including only one electrode. Because Coffee clearly requires use of two comminution means, including two electrodes, Claim 18 and all claims depending therefrom, including Claims 19-21, are patentably distinct thereover.

Claims 14 and 16 depend from Claim 13. In light of the claim amendments presented herein and in light of the above discussion, Claim 13 is believed patentable at this time. Accordingly, Claims 14 and 16 are believed novel and nonobvious in light of Coffee and Schroeder.

In summary, Claims 1 through 24 are believed to be allowable for the reasons given herein. Accordingly, these claims remain pending following entry of this Amendment, and are believed to be in condition for allowance at this time. As such,

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Reply to Office Action of April 12, 2005

Applicant respectfully requests entry of the present Amendment and reconsideration of the application, with an early and favorable decision being solicited. Should the Examiner believe that the prosecution of the application could be expedited, the Examiner is requested to call Applicant's undersigned representative at the number listed below.

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